

**NAME**

EVP\_set\_default\_properties, EVP\_default\_properties\_enable\_fips,  
EVP\_default\_properties\_is\_fips\_enabled - Set default properties for future algorithm fetches

**SYNOPSIS**

```
#include <openssl/evp.h>
```

```
int EVP_set_default_properties(OSSL_LIB_CTX *libctx, const char *propq);
int EVP_default_properties_enable_fips(OSSL_LIB_CTX *libctx, int enable);
int EVP_default_properties_is_fips_enabled(OSSL_LIB_CTX *libctx);
```

**DESCRIPTION**

**EVP\_set\_default\_properties()** sets the default properties for all future EVP algorithm fetches, implicit as well as explicit. See "ALGORITHM FETCHING" in **crypto(7)** for information about implicit and explicit fetching.

EVP\_set\_default\_properties stores the properties given with the string *propq* among the EVP data that's been stored in the library context given with *libctx* (NULL signifies the default library context).

Any previous default property for the specified library context will be dropped.

**EVP\_default\_properties\_enable\_fips()** sets the 'fips=yes' to be a default property if *enable* is non zero, otherwise it clears 'fips' from the default property query for the given *libctx*. It merges the fips default property query with any existing query strings that have been set via **EVP\_set\_default\_properties()**.

**EVP\_default\_properties\_is\_fips\_enabled()** indicates if 'fips=yes' is a default property for the given *libctx*.

**NOTES**

**EVP\_set\_default\_properties()** and **EVP\_default\_properties\_enable\_fips()** are not thread safe. They are intended to be called only during the initialisation phase of a *libctx*.

**RETURN VALUES**

**EVP\_set\_default\_properties()** and **EVP\_default\_properties\_enable\_fips()** return 1 on success, or 0 on failure. An error is placed on the error stack if a failure occurs.

**EVP\_default\_properties\_is\_fips\_enabled()** returns 1 if the 'fips=yes' default property is set for the given *libctx*, otherwise it returns 0.

**SEE ALSO**

EVP\_SET\_DEFAULT\_PROPERTIES(3ossl) OpenSSL EVP\_SET\_DEFAULT\_PROPERTIES(3ossl)

## **EVP\_MD\_fetch(3)**

### **HISTORY**

The functions described here were added in OpenSSL 3.0.

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